

SPECIFICATION AMENDMENTS

Please amend the ABSTRACT as follows:

Described herein is technology for inserting and detecting watermarks in signals, such as a music clip. ~~The watermark identifies the content producer, providing a signature that is embedded in the audio signal and cannot be removed. The watermark is designed to survive all typical kinds of processing and malicious attacks.~~ In one described implementation, a watermarking system employs chess spread-spectrum sequences (i.e., "chess watermarks") to improve the balance of positive and negative chips in the watermarking sequences. ~~The balance is not imposed in an orderly fashion, which might make the watermark sequence more easily detectable to an attacker, but in a pseudo-random fashion. In that way, better sequence balance is achieved while preserving its randomness for an attacker without knowledge of the keys.~~ In another described implementation, a watermarking system employs an energy-level trigger to determine whether to skip encoding of a portion of a watermark within a given time span of an audio clip. If a large discrepancy in energy levels exists over a given time frame, then the frame is not watermarked, to avoid audible

1 time-dispersion of artifacts due to spectral modifications
2 (~~which are similar to "pre-echo" effects in audio coding~~). In
3 another described implementation, a watermarking system
4 begins encoding of a watermark at a variable position after
5 the beginning of ~~an audio~~ a clip.
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1 Please amend lines 1-12 on page 15:

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3 In addition, the following co-pending patent application is
4 ~~applications are~~ incorporated by reference herein: U.S. Patent
5 Application Serial No. 09/316,899, entitled "Audio Watermarking
6 with Dual Watermarks" filed on May 22, 1999, and assigned to the
7 Microsoft Corporation, Corporation; and

8 ~~• U.S. Patent Application Serial No. 09/259,669, entitled "A~~
9 ~~System and Method for Producing Modulated Complex~~
10 ~~Lapped Transforms" filed on February 26, 1999, and assigned~~
11 ~~to the Microsoft Corporation.~~

12 ~~The following U.S. Patent is incorporated by reference herein: U.S.~~
13 ~~Patent No. 6,029,126, entitled "Scalable Audio Coder and Decoder" issued~~
14 ~~on February 22, 2000, and assigned to the Microsoft Corporation.~~

15 The following commonly owned (by the Microsoft Corporation)

16 U.S. Patents are incorporated by reference herein:

- 17 • U.S. Patent No. 6,029,126, entitled "Scalable Audio Coder and
18 Decoder" issued on February 22, 2000;
19 • U.S. Patent No. 6,487,574, entitled "A System and Method for
20 Producing Modulated Complex Lapped Transforms" issued on
21 November 26, 2002.